CLAIMS

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1. In a quasi-associated signaling communications network including a terminating remote communication device, a method of establishing a network signal path, the method comprising:

receiving a first telephone number for a terminating remote communication device;

searching for Local Routing Number (LRN) instructions, associated with the first telephone number;

using the LRN instructions, establishing a signal connection to a service node which monitors services;

establishing a signal connection between the service node and the terminating remote communication device; and

using the service node, monitoring signals to the terminating remote communication.

2. The method of claim 1 wherein the service node is a Service Control Point (SCP);

in which the signal connection between the service node and the terminating remote communication device is an out-of-band signal connection; and

in which the monitoring of signals by the SCP includes monitoring out-of-band signals.

3. The method of claim 2 in which monitoring the out-of-band signals includes determining the network services provided to the terminating remote communication device.

4. The method of claim 3 in which the monitoring of services includes determining services selected from the group including prepaid caller plans and universal number plans.

5. The method of claim 1 in which the establishment of a signal connection between the service node and the terminating remote communications device includes establishing a trunk route for voice communications.

6. The method of claim 5 wherein the service node is selected from the group including Intelligent Peripherals (IP)s, Service Switching Point (SSP), and combinations of IPs and SSPs.

7. The method of claim 6 wherein the service node is an IP, the method further comprising:

establishing a signal connection through the IP to monitor voice communications services selected from the group including voice mail, call screening, voice recognition, and other services involving voice capture and announcement.

8. The method of claim 1 wherein a Local Number Portability (LNP) database is accessed, the method further comprising:

determining if the first telephone number is a ported number;

searching for the first number in an LNP database; and

in which the search for the associated Local Routing Number (LRN) includes retrieving the LRN instructions from the LNP database.

9. The method as in claim 8 wherein an originating remote communication device is provided, the method further comprising:

using the originating remote communication device, initiating a voice communication with the terminating remote communication device; and

in which the reception of the first telephone number includes the originating remote communication device dialing the first telephone number.

10. The method of claim 9 wherein an (N-1) Switch Signal Point (SSP) and a terminating switch are accessed, and in which establishment of the signal connection between the service node and the terminating remote communications device includes:

routing voice communication between the terminating remote communication device and a terminating switch associated with the terminating remote communication device;

trunking between the terminating switch and an (N-1) SSP; and

routing the voice communications between the (N-1) SSP and the originating remote communication device.

11. The method of claim 10 wherein the terminating remote unit is a wireless telephone and the terminating switch associated with the first number is a Mobile Switching Center (MSC) for a wireless network; and

in which routing of voice communications between the terminating switch and the terminating remote communication device includes establishing voice communication between the MSC and the terminating remote communication device.

12. In a quasi-associated signaling communications network, a system for establishing network signal paths comprising:

a terminating remote communication device, having a first telephone number, to send and receive voice communications;

a service node connected in the signal path to said terminating remote communication device;

a Local Number Portability (LNP) database including a cross-referenced list of ported telephone numbers and Local Routing Numbers (LRN)s, said LNP database supplying the LRN instruction to said service node in response to the provision of the first telephone number of said terminating remote communication device;

and in which said service node provides network services to said terminating remote communication device in response to being connected in the signal path.

13. The system of claim 12 in which said service node is a Service Control Point (SCP) connected in the out-of-band signal path to said terminating remote communication device.

14. The system of claim 13 in which said SCP monitors out-of-band communications to provide network services selected from the group including caller prepaid and universal number plans.

15. The system of claim 12 in which said service node is selected from the group including Intelligent Peripherals (IP)s, Service Switching Point (SSP), and combinations of IPs and SSPs, connected in the voice communication signal path to said terminating remote communication device.

16. The system of claim 15 in which said service node is an IP to provide network services selected from the group including voice mail, voice recognition, call screening, and other services involving voice capture and announcement.

17. The system of claim 12 further comprising:

a terminating switch associated with the first telephone number of said terminating remote communication device; and

in which said service node creates a trunk connection to said terminating switch.

18. The system of claim 17 in which said terminating remote communication device is a wireless telephone;

in which said terminating switch is a Mobile Switching Center (MSC) for a wireless network, said MSC being connected to said terminating remote communication device through a wireless medium.

19. The system of claim 17 further comprising:

an (N-1) Switch Signal Point (SSP);

an originating remote communication device connected to said (N-1) SSP, said originating remote communication device originating and dialing the first number of said terminating remote communication device;

in which said (N-1) SSP includes mechanisms for initiating the determination of whether the first telephone number of said terminating remote communication device is a ported number;

in which said (N-1) SSP initiates out-of-band communication signals with said LNP to determine the LRN of the first telephone number; and

in which said (N-1) SSP initiates communication with said service node in response to receiving the LRN.

20. The system of claim 12 in which said service node monitors communications with said terminating remote communication device to provide billing information associated with network services used by said terminating remote communication device.

21. In a communications network, a method for using a service node to bill a terminating telephone for network services, the method comprises:

entering the telephone number of the terminating telephone;

determining the Local Routing Number (LRN) associated with the telephone number of the terminating telephone;

in response to the LRN, creating a service node in the signal path to the terminating telephone;

monitoring the communications with the terminating telephone using the service node to determine the service provided; and

billing the terminating telephone in response to the monitored services.

22. The method of claim 21 wherein the terminating telephone is a wireless telephone, and further comprises:

determining if the telephone number of the wireless telephone is a ported number; and

in which the LRN determination includes searching a Local Number Portability (LNP) database of ported numbers to find the LRN.

23. The method of claim 22 wherein the service node is a Service Control Point (SCP);

in which the monitoring of communications includes monitoring out-of-band communication signals to the terminating telephone; and

in which the monitored services are selected from the group including caller prepaid plans and universal number plans.

24. The method of claim 22 wherein the service node is selected from the group including Intelligent Peripherals (IP)s, Service Switching Point (SSP), or combinations of IPs and SSPs; and

in which the monitoring of communications includes monitoring voice communications.

25. The method of claim 24 in which the service node is an IP; and

in which the monitored services are selected from the group including call screening, voice activation services, and voice mail.

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